

**IN THE CLAIMS:**

Please amend claims 1, 3, 4, 8, 9, 11, 12 and 16-19. Please cancel claims 2 and 10 without prejudice. Please add new claims 21-24. Claims 1, 3-9 and 11-24 are currently pending in the application.

1. (Currently Amended) Apparatus for analysis of a cytological ~~biological~~ specimen, comprising:  
a cytological ~~biological~~ specimen carrier; and  
a read/write data storage device attached to the carrier,  
wherein data related to cellular ~~an~~ analysis of a the cytological ~~biological~~ specimen carried in or on the carrier may be stored in, and retrieved from, the data storage device.
2. (Canceled).
3. (Currently Amended) The apparatus of claim 1, the cytological ~~biological~~ specimen carrier comprising a slide.
4. (Currently Amended) The apparatus of claim 1, the cytological ~~biological~~ specimen carrier comprising a vial.
5. (Original) The apparatus of claim 1, the data storage device comprising a radio frequency identification device.
6. (Original) The apparatus of claim 1, the data storage device comprising a magnetic storage device.
7. (Original) The apparatus of claim 1, the data storage device comprising an optical storage device.

8. (Currently Amended) The apparatus of claim 1, wherein the data related to the analysis of the cytological ~~biological~~ specimen is an identifier or, a timestamp, ~~coordinates of a field of interest, or~~ ~~coordinates of a marked target zone.~~
9. (Currently Amended) A system for analyzing a cytological ~~biological~~ specimen, comprising:  
a cytological ~~biological~~ specimen carrier;  
an imaging device configured to obtain images of a cytological ~~biological~~ specimen carried in the carrier;  
a processor implemented program for analyzing images of the specimen obtained by the imaging device and for identifying objects in the specimen from the images;  
a microscope for viewing objects in the specimen identified by the processor implemented program; and  
a read/write data storage device attached to the cytological ~~biological~~ specimen carrier, wherein data related to an analysis of the cytological specimen may be stored in or on, and retrieved from, the data storage device.
10. (Canceled).
11. (Currently Amended) The system of claim 9, the cytological ~~biological~~ specimen carrier comprising a slide.
12. (Currently Amended) The system of claim 9, the cytological ~~biological~~ specimen carrier comprising a vial.
13. (Original) The system of claim 9, the data storage device comprising a radio frequency identification device.
14. (Original) The system of claim 9, the data storage device comprising a magnetic storage device.

15. (Original) The system of claim 9, the data storage device comprising an optical storage medium.
16. (Currently Amended) The system of claim 9, the data comprising slide coordinates of locations of identified objects in the cytological specimen.
17. (Currently Amended) The system of claim 9, wherein the data related to the analysis of the specimen is an identifier or, a timestamp, ~~coordinates of a field of interest, or coordinates of a marked target zone.~~
18. (Currently Amended) A method for analyzing a cytological ~~biological~~ specimen, comprising: providing a cytological ~~biological~~ specimen ~~in a~~ in or on a cytological specimen carrier; and storing data related to ~~the cellular~~ analysis of the cytological specimen in a read/write data storage device attached to the cytological specimen carrier.
19. (Currently Amended) The method of claim 18, further comprising obtaining images of the cytological ~~biological~~ specimen; and analyzing the images with a processor implemented program, wherein the stored data comprises locations of objects of interest in the cytological specimen that were identified by the image analysis.
20. (Original) The method of claim 18, the data storage device comprising a radio frequency identification device.
21. (New) The system of claim 9, wherein data related to the analysis of the cytological specimen is cellular analysis data.
22. (New) The apparatus 1, wherein data related to the cellular analysis of the cytological specimen is a coordinate of a field of interest or a coordinate of a marked target zone.

23. (New) The apparatus of claim 9, wherein data related to the analysis of the cytological specimen is a coordinate of a field of interest or a coordinate of a marked target zone.
24. (New) The method of claim 18, wherein data related to the cellular analysis of the cytological specimen is a coordinate of a field of interest or a coordinate of a marked target zone.